

## **REMARKS**

Favorable reconsideration of this application in light of the following remarks is respectfully requested.

No claims having been cancelled and claims 15-21 having been added, the Applicants respectfully submit that claims 2-21 remain pending in the present application and properly under consideration with claims 2, 10, 11 and 15 being presented in independent form.

### **Rejections under 35 U.S.C. § 103**

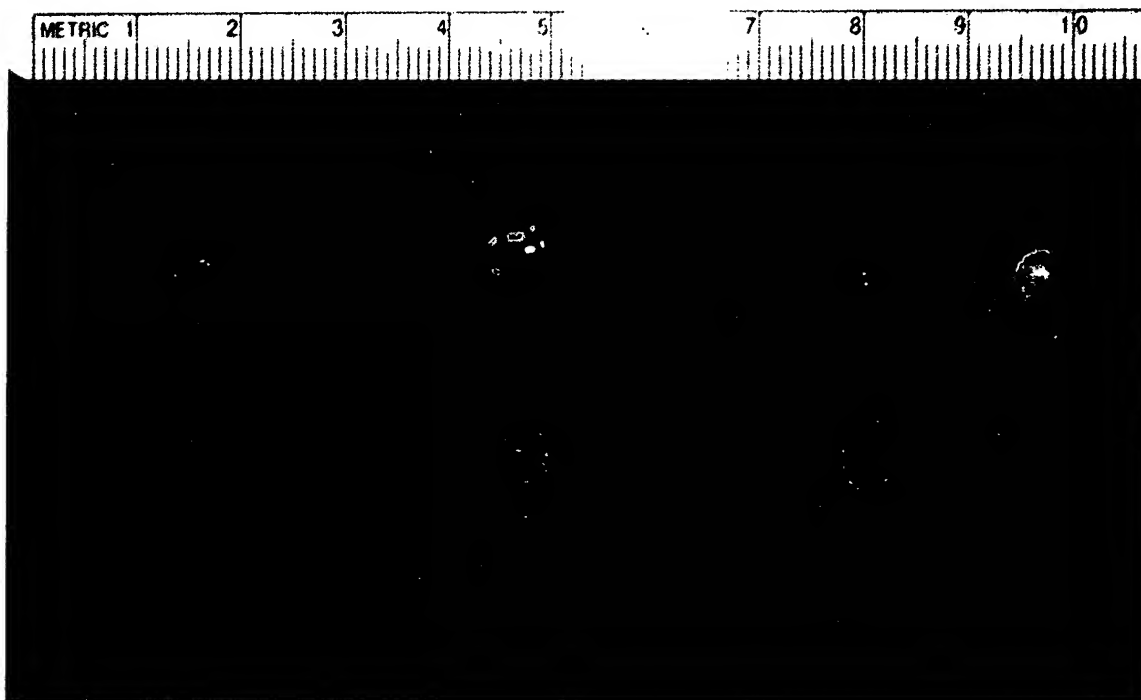
Claims 2-14 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Haman et al.'s U.S. Patent No. 4,656,092 ("Haman") in view of Brox et al.'s U.S. Patent No. 6,589,536 ("Brox") and Stolz U.S. Patent No. 6,530,962 ("Stolz"). The Applicants respectfully traverse this rejection for the reasons detailed below.

With regard to the term "seamless" and the significance of this term within the art and with regard to the function of the resulting BB paintballs, the Applicants supplement their arguments as presented in the response timely filed February 14, 2006, with the following discussion and the supporting Declaration of Robert Collins filed herewith.

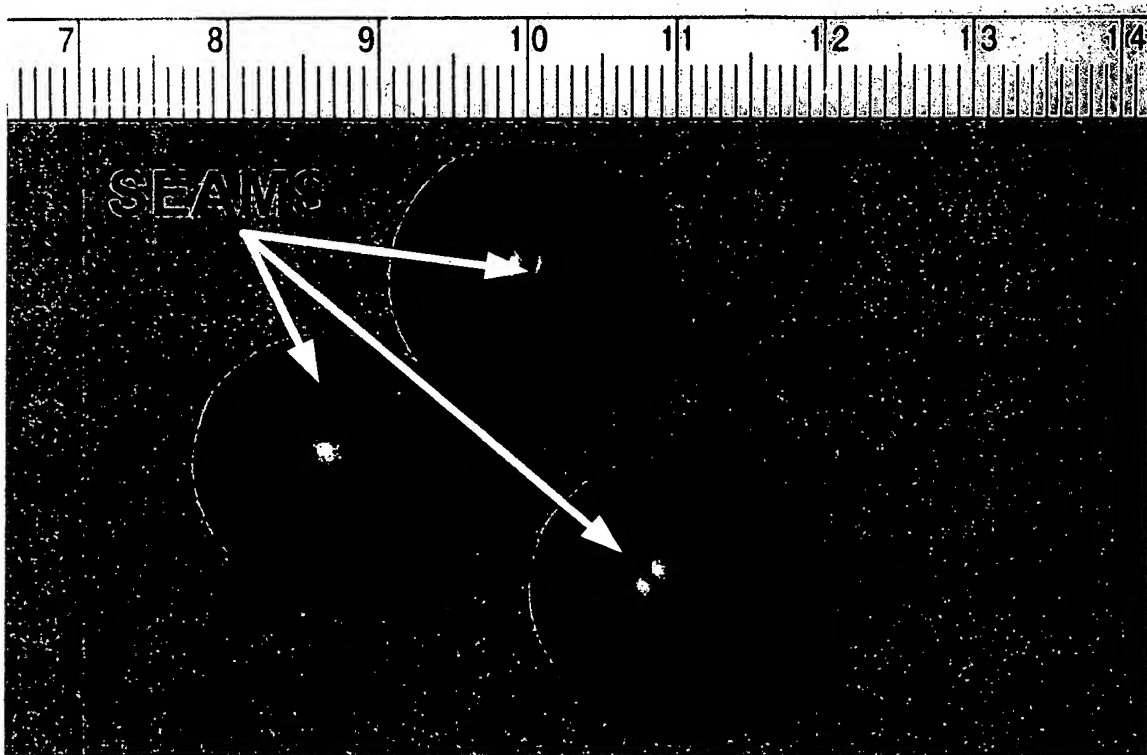
### **Structural Differences**

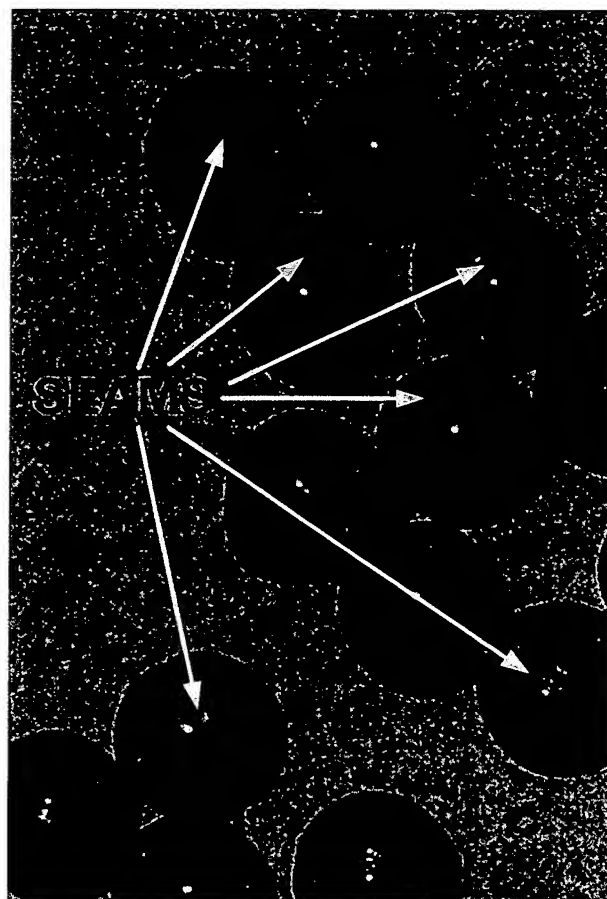
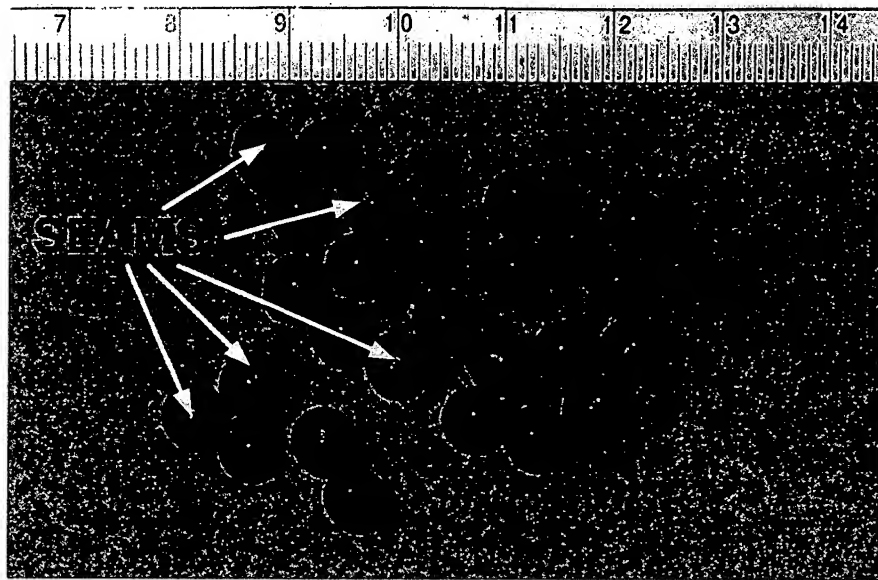
As reflected in the image below, conventional paintballs (B-purple) are much larger than the seamless BB paintballs of the invention (A-blue), solid plastic BBs (C-yellow) and competitive seamed BB paintballs (D-red). Accordingly, when

manufactured using the conventional die-mold process, the thickness of the sheets being pressed together can be sufficient to provide a generally spherical paintball with good durability. When the conventional process is used to manufacture smaller BB paintballs, however, the thickness of the sheets used in forming the shell must necessarily be reduced, resulting in BB paintballs (C) that are increasingly irregular in shape and less tolerant of the handling inherent in their use in the spring-loaded magazines used in conventional BB weapons. Accordingly, the accuracy of the conventional BB paintballs is degraded by their departure from the desired spherical shape and the likelihood of jamming or premature breakage within the weapon is increased.



As noted by Mr. Collins, when two sheets of material are pressed together as in the production of conventional paintballs, a junction line or seam will necessarily be formed between the two hemispherical portions of the shell. Collins' Decl. ¶ 3. These seams are clearly visible in both the larger (purple) conventional paintballs and the smaller (red) conventional BB paintballs illustrated below.

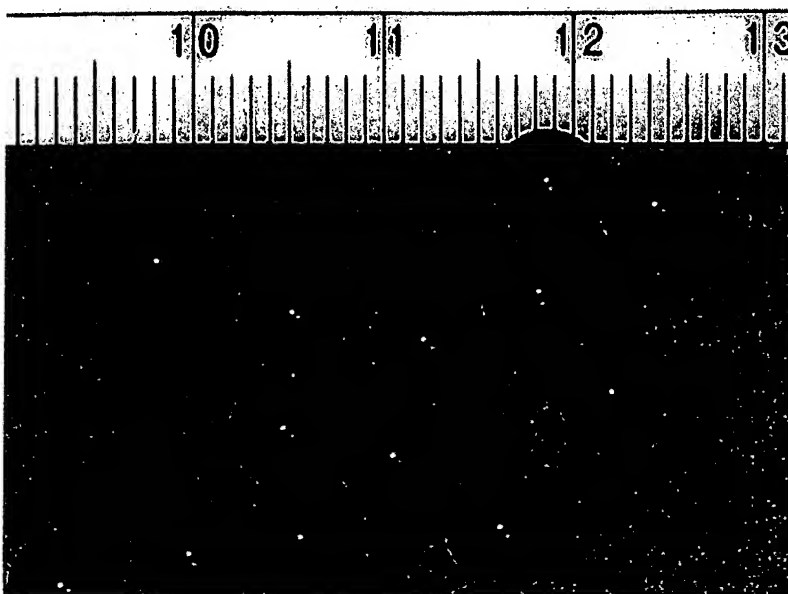




As noted by Mr. Collins, Collins' Decl. ¶¶ 4 and 5, particularly with respect to the smaller conventional paintballs, producing paintballs from two separate sheets of material compromises both their structural integrity and their performance.

The seamless paintballs structured according to the invention (shown below) however, do not exhibit the seams and irregular shapes of the conventional paintballs and, accordingly, do not share the deficiencies noted with respect to the conventional paintballs, Collins' Decl. ¶ 6.





### Commercial Success

The advantages provided by the seamless paintballs of the invention have resulted in their commercial success, despite premium pricing on the order of two times that of the competing conventional paintballs. Collins' Decl. ¶ 7. Given that the seamless paintballs according to the invention and conventional paintballs are sized and marketed for use in identical 6 mm paintball applications, are available through the same source, are available in similar colors and are equally available to Mr. Collins' customers, the Applicant contends that the noted commercial success of the seamless paintballs according to the invention, particularly in light of the premium pricing, is directly and solely attributable to the advantages afforded by the claimed paintball construction.

The Applicants request, therefore, that these rejections be reconsidered and withdrawn.

**Comments on Response to Arguments**

As discussed above, whether or not Haman was “explicit” in characterizing his paintball as “seamless,” Action at 3, the *only* production method taught or suggested by Haman is *incapable* of making a paintball that does not include a seam. Indeed, as noted above, Mr. Collins, a person familiar with both the conventional and claimed paintball construction confirms that conventional paintballs manufactured in the only manner suggested by Haman do, most definitely, include a prominent and readily visible seam. Accordingly, Haman cannot fairly be said to teach or suggest a paintball that is “seamless,” *i.e.*, utilizes a shell that *does not include a seam*, when those skilled in the art know that a seam exists and that the performance of the conventional paintballs is compromised as a result. Notwithstanding Haman’s language, in light of the undisputed facts to the contrary, the Applicants maintain that none of the applied references can fairly be said to teach or suggest a “seamless paintball” as required by each of the pending claims.

The Applicants note that the conventional definitions of seam include:

a joint formed by joining two pieces; and

a line formed by joining two edges.

The Applicants maintain that Haman’s disclosure makes clear that the conventional paintballs manufactured in the only manner disclosed or suggested will inevitably include a “seam” as that term is commonly defined and understood. The Applicants contend that

the Examiner's reliance on Haman's use of the term "seamless" when that use is clearly at odds with the balance of Haman's disclosure, the plain meaning of the term, and the understanding of those skilled in the art with regard to the construction of conventional paintballs, Collins' Decl. ¶¶ 3-5, is misplaced and does not constitute a sufficient basis on which to maintain the present rejections. *Ex parte Clapp*, 227 USPQ 972, 973 (B.P.A.I. 1985). The Applicants maintain, therefore, that the Examiner's interpretation of Haman's disclosure should be reconsidered and withdrawn accordingly in light of a fair and consistent reading of the contemporary references as a whole.

With regard to the Examiner's contentions regarding a "difference in degree," Action at 4, the Applicants contend that no logical or evidentiary basis has been established under which the term "seamless" is not limited to those structures which, consistent with the literal meaning of the term, do *not* include any seams. Accordingly, the Applicants maintain that any conventional paintball formed by pressing two premanufactured solid sheets together in a die will definitely include a seam and that such paintballs cannot fairly be characterized as "seamless."

Again, as detailed in the remarks provided above, each of the applied references is clearly and unequivocally directed to means of capsule production that will inevitably produce "seamed" capsules. The Applicants maintain, therefore, that no teaching has yet been identified that can fairly be said to render the claimed "seamless paintballs" obvious.

**New Claims 15-21**

As reflected in the claim amendments above, claim 15, and claims 16-21 which depend therefrom, have been introduced to provide additional language for defining the “seamless” construction of the claimed paintballs. The Applicants contend that these claims are consistent with the specification and claims as originally filed as well as the Applicants arguments with respect to the term “seamless.” The Applicants submit that the “the shell is of a unitary, one-piece construction” recitation in claim 15 explicitly excludes the prior art constructions in which two separate sheets of material are pressed together in a die to form a shell. The Applicants maintain, therefore, that these new claims, as well as the previously presented claims, are allowable over the applied references, whether considered singly or in combination.

**CONCLUSION**

In view of the above remarks, the Applicants respectfully submit that each of the pending rejections has been addressed and overcome, leaving the present application in condition for allowance. A notice to that effect is respectfully requested.

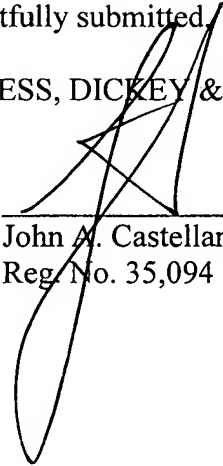
If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.


If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge any underpayment or non-payment of any fees required under 37 C.F.R. §§ 1.16 or 1.17, or credit any overpayment of such fees, to Deposit Account No. 08-0750, including, in particular, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY & PIERCE, P.L.C.

By:

  
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